

INTERNATIONAL SEARCH REPORT

 International Application No
 PCT/FI2004/000586

A. CLASSIFICATION OF SUBJECT MATTER

 IPC 7 B01J4/00 B01J19/26 D21H23/04 B05B7/04 B01F5/04
 B01F3/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B01J D21H B05B B01F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 387 247 B1 (CHEN YE-MON) 14 May 2002 (2002-05-14) column 3, line 65 - column 5, line 7 figures 1,2a	8-16,18, 23,24
X	US 945 143 A (SMAMEK JACQUES) 4 January 1910 (1910-01-04) figure 1	1,3-5, 8-11,14, 15,20-22
A	WO 99/43887 A (AHLSTROM MACHINERY OY ; MATULA JOUNI (FI)) 2 September 1999 (1999-09-02) cited in the application the whole document ----- -/--	1,8



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

18 January 2005

Date of mailing of the international search report

25/01/2005

Name and mailing address of the ISA

 European Patent Office, P.B. 5818 Patentlaan 2
 NL - 2280 HV Rijswijk
 Tel (+31-70) 340-2040, Tx. 31 651 epo nl,
 Fax (+31-70) 340-3016

Authorized officer

Vlassis, M

INTERNATIONAL SEARCH REPORT

International Application No
PCT/FI2004/000586

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	FR 952 711 A (TIJOUX M.PIERRE) 23 November 1949 (1949-11-23) the whole document -----	1,3-5, 8-11
A	FR 1 453 925 A (CELANESE CORP) 22 July 1966 (1966-07-22) page 4, paragraph 4 - paragraph 6 figure 7 -----	8-12,19

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/FI2004/000586

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6387247	B1	14-05-2002	AT 240378 T 15-05-2003
		AU 758217 B2 20-03-2003	
		AU 7417100 A 10-04-2001	
		BR 0013699 A 07-05-2002	
		CA 2383826 A1 15-03-2001	
		CN 1371413 T 25-09-2002	
		DE 60002741 D1 18-06-2003	
		DE 60002741 T2 18-03-2004	
		WO 0118153 A2 15-03-2001	
		EP 1218468 A2 03-07-2002	
		ES 2199858 T3 01-03-2004	
		JP 2003509533 T 11-03-2003	
		US 6736960 B1 18-05-2004	
		ZA 200201686 A 18-09-2002	
US 945143	A	NONE	
WO 9943887	A	02-09-1999	FI 980437 A 27-08-1999
		AT 262617 T 15-04-2004	
		BR 9908306 A 04-09-2001	
		CA 2321863 A1 02-09-1999	
		DE 69915810 D1 29-04-2004	
		EP 1219344 A2 03-07-2002	
		EP 1064427 A1 03-01-2001	
		WO 9943887 A1 02-09-1999	
		JP 2002505179 T 19-02-2002	
		US 2002131325 A1 19-09-2002	
		US 6659636 B1 09-12-2003	
FR 952711	A	23-11-1949	NONE
FR 1453925	A	22-07-1966	BE 666811 A 13-01-1966
		DE 1542039 A1 26-02-1970	
		GB 1109282 A 10-04-1968	
		NL 6508755 A 14-01-1966	
		US 3522017 A 28-07-1970	